



(1) GENERAL INFORMATION
(i) APPLICANT: S. Leons, Michael
Gach

(ii) TITLE OF INVENTION: Method for PR-39 peptide regulated stimulation of angiogenesis
(iii) NUMBER OF SEQUENCES: 14
(iv) CORRESPONDENCE ADDRESS:
(A) ADDRESSEE: David Prashker, Esq.
(B) STREET: P.O. Box 5387
(C) CITY: Magnolia
(D) STATE: Massachusetts
(E) COUNTRY: USA
(F) ZIP: 01930

(v) COMPUTER READABLE FORM:
(A) MEDIUM TYPE: Diskette, 3.50 inch, 1.40 Mb storage
(B) COMPUTER: IBM PS/1
(C) OPERATING SYSTEM: MS DOS
(D) SOFTWARE: WordPerfect version 5.1

(vi) CURRENT APPLICATION DATA:
(A) APPLICATION NUMBER: 09/276,868
(B) FILING DATE: March 26, 1999
(C) CLASSIFICATION: Unknown

(viii) ATTORNEY/AGENT INFORMATION:
(A) NAME: David Prashker, Esq.
(B) REGISTRATION NUMBER: 29,693
(C) REFERENCE/DOCKET NUMBER: BIS-043
(ix) TELECOMMUNICATION INFORMATION:
(A) TELEPHONE: (978) 525-3794

(2) INFORMATION FOR SEQ ID NO:1:
(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 39 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

Arg Arg Arg Pro Arg Pro Pro Tyr Leu Pro Arg Pro Arg Pro Pro
1 5 10 15
Phe Phe Pro Pro Arg Leu Pro Pro Arg Ile Pro Pro Gly Phe Pro Pro
20 25 30
Arg Phe Pro Pro Arg Phe Pro
35

(2) INFORMATION FOR SEQ ID NO:2:
(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 39 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

Arg Arg Arg Pro Arg Pro Pro Tyr Leu Pro Arg Pro Arg Pro Pro
1 5 10 15
Phe Phe Pro Pro Arg Leu Pro Pro Arg Ile Pro Pro Gly Phe Pro Pro
20 25 30
Arg Phe Pro Pro Arg Phe Pro
35

(2) INFORMATION FOR SEQ ID NO:3:
(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 15 amino acids
(B) TYPE: amino acid

- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

Arg Arg Arg Pro Arg Pro Pro Tyr Leu Pro Arg Pro Arg Pro Pro
 1 5 10 15

- (2) INFORMATION FOR SEQ ID NO:4:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 11 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

Arg Arg Arg Pro Arg Pro Pro Tyr Leu Pro Arg
 1 5 10

- (2) INFORMATION FOR SEQ ID NO:5:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 8 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

Arg Arg Arg Pro Arg Pro Pro Tyr
 1 5

- (2) INFORMATION FOR SEQ ID NO:6:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 39 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

Arg Arg Arg Pro Arg Pro Pro Tyr Leu Pro Arg Pro Arg Pro Pro Pro
 1 5 10 15
 Phe Phe Pro Pro Arg Leu Pro Pro Arg Ile Pro Pro Gly Phe Pro Pro
 20 25 30
 Arg Phe Pro Pro Arg Phe Pro
 35

- (2) INFORMATION FOR SEQ ID NO:7:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 11 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

Arg Arg Arg Pro Arg Pro Pro Tyr Leu Pro Arg
 1 5 10

- (2) INFORMATION FOR SEQ ID NO:8:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 255 amino acids
 - (B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

Met	Ser	Ser	Ile	Gly	Thr	Gly	Tyr	Asp	Leu	Ser	Ala	Ser	Thr	Phe	Ser
1				5					10					15	
Pro	Asp	Gly	Arg	Val	Phe	Gln	Val	Glu	Tyr	Ala	Met	Lys	Ala	Val	Glu
			20					25					30		
Asn	Ser	Ser	Thr	Ala	Ile	Gly	Ile	Arg	Cys	Lys	Asp	Gly	Val	Val	Phe
		35				40					45				
Gly	Val	Glu	Lys	Leu	Val	Leu	Ser	Lys	Leu	Tyr	Glu	Glu	Gly	Ser	Asn
	50					55				60					
Lys	Arg	Leu	Phe	Asn	Val	Asp	Arg	His	Val	Gly	Met	Ala	Val	Ala	Gly
65				70					75					80	
Leu	Leu	Ala	Asp	Ala	Arg	Ser	Leu	Ala	Asp	Ile	Ala	Arg	Glu	Glu	Ala
			85					90					95		
Ser	Asn	Phe	Arg	Ser	Asn	Phe	Gly	Tyr	Asn	Ile	Pro	Leu	Lys	His	Leu
		100					105					110			
Ala	Asp	Arg	Val	Ala	Met	Tyr	Val	His	Ala	Tyr	Thr	Leu	Tyr	Ser	Ala
	115					120						125			
Val	Arg	Pro	Phe	Gly	Cys	Ser	Phe	Met	Leu	Gly	Ser	Tyr	Ser	Ala	Asn
	130				135					140					
Asp	Gly	Ala	Gln	Leu	Tyr	Met	Ile	Asp	Met	Ser	Gly	Val	Ser	Tyr	Gly
145				150					155					160	
Tyr	Trp	Gly	Cys	Ala	Ile	Gly	Lys	Ala	Arg	Gln	Ala	Ala	Lys	Thr	Glu
			165					170						175	
Ile	Glu	Lys	Leu	Gln	Met	Lys	Glu	Met	Thr	Cys	Arg	Asp	Val	Val	Lys
		180					185					190			
Glu	Val	Ala	Lys	Ile	Ile	Tyr	Ile	Val	His	Asp	Glu	Val	Lys	Asp	Lys
	195					200					205				
Ala	Phe	Glu	Leu	Glu	Leu	Ser	Trp	Val	Gly	Glu	Leu	Thr	Lys	Gly	Arg
	210				215					220					
His	Glu	Ile	Val	Pro	Lys	Asp	Ile	Arg	Glu	Glu	Ala	Glu	Lys	Tyr	Ala
225				230					235					240	
Lys	Glu	Ser	Leu	Lys	Glu	Glu	Asp	Glu	Ser	Asp	Asp	Asp	Asn	Met	
			245					250					255		

(2) INFORMATION FOR SEQ ID NO:9:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 4 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

Ala Glu Arg Asp

1

(2) INFORMATION FOR SEQ ID NO:10:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 1 amino acid

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

Ala

1

(2) INFORMATION FOR SEQ ID NO:11:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 24 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

Lys Lys His Glu Glu Glu Ala Lys Ala Glu Arg Glu Lys Lys Glu
1 5 10 15
Lys Glu Gln Lys Lys Asp Lys
20

(2) INFORMATION FOR SEQ ID NO:12:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 16 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

Glu Lys Glu Lys Glu Glu Asn Glu Lys Lys Lys Gln Lys Lys Ala Ser
1 5 10 15

(2) INFORMATION FOR SEQ ID NO:13:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 27 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:

Glu Glu Arg Pro Gln Arg Lys Ala Gln Pro Ala Gln Pro Ala Asp Glu
1 5 10 15
Pro Ala Glu Lys Ala Asp Glu Pro Met Glu His
20 25

(2) INFORMATION FOR SEQ ID NO:14:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 16 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:

Ala Lys Glu Ser Leu Lys Glu Glu Asp Glu Ser Asp Asp Asp Asn Met
1 5 10 15